



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/862,643	05/22/2001	Robert N. Nelson		9818

7590 10/01/2003
DILLIS V. ALLEN
ATTORNEY AT LAW
Suite 205
1080 Nerge Road
Elk Grove Village, IL 60007

EXAMINER

NGUYEN, JOSEPH D

ART UNIT	PAPER NUMBER
----------	--------------

2683

DATE MAILED: 10/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/862,643

Applicant(s)

NELSON ET AL.

Examiner

Joseph D Nguyen

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-15 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 16-27 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Allowable Subject Matter

1. *Claims 8-15 are allowed.*

The following is an examiner's statement of reasons for allowance:

2. Regarding claims 8 and 14, The Lee reference discloses method and apparatus for a vehicle separable hands free unit for mobile wireless telephone having internal audio circuitry for an internal speaker and an internal microphone, comprising: a base unit, a vehicle separable connector, a hands free speaker and a hands free microphone. (abstract, fig. 1-6, and col. 2 lines 20-41).

This reference does not specifically disclose the vehicle separate hands free unit for mobile telephone, the hands free unit having a microprocessor for sending an ID request packet to telephone and receiving a phone ID packet from the phone to utilizing the same ID packet to generate an AHF packet or an PHF packet to the telephone for commanding the telephone to disconnect or connect the telephone's internal speaker and internal microphone.

Regarding claims 9-13, and 15, these claims are allowed as being dependent upon independent claims that have been allowed.

Claim Objections

3. Applicant is advised that should claim 19 be found allowable, claim 21 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Note: Examiner is considering claim 21 depending on claim 20 for further examining.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 16-21, and 23-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee (6,076,000).

Regarding claim 16, Lee disclosed an aftermarket hands free unit for a mobile wireless telephone (abstract, fig. 1), comprising:

Art Unit: 2683

- a base unit having an integral generally annular nose insertable into a vehicle power socket (#11 fig. 1), said base including a housing with upper and lower housing portions (fig. 1), a circuit board clam shelled between the upper and lower housing portions (#14 fig. 2, and fig. 4), and a speaker clam shelled between the circuit board and the upper housing portion (#13 fig. 2, and fig. 6).

Regarding claim 17, Lee further discloses an aftermarket hands free unit for a mobile wireless telephone, wherein the upper housing portion has a grill (#13 fig. 1) for the speaker.

Regarding claim 18, Lee further discloses an aftermarket hands free unit for a mobile wireless telephone including a finger insertable recess in the housing with a switch (#15 fig. 1) therein for operating the hands free unit.

Regarding claim 19, Lee further discloses an aftermarket hands free unit for a mobile wireless telephone, wherein the switch is an optical switch (#15 fig. 1).

Regarding claim 20, Lee further discloses an aftermarket hands free unit for a mobile wireless telephone, comprising: a base unit having an integral generally annular nose insertable into a vehicle power socket (#11 fig. 1), said base including a housing, a finger insertable recess in the housing with a switch (#15 fig. 1) therein for operating the hands free unit.

Regarding claim 21, Lee further discloses an aftermarket hands free unit for a mobile wireless telephone, wherein the switch is an optical switch (#15 fig. 1).

Regarding claim 23, Lee discloses a vehicle separable hands free unit for a mobile wireless telephone having internal audio circuitry for an internal speaker and an

Art Unit: 2683

internal microphone (abstract, fig. 1, and fig. 4-5), comprising: a base unit, a vehicle separable connector quickly connectable to the vehicle's power supply for supplying power to the base unit, said base unit including a hands free speaker and a hands free microphone, and a circuit in the base unit permitting connection of the base unit to a phone during a call without interrupting the call (abstract, fig. 1, fig. 4-5, and col. 2 line 42 thru col. 3 line 5).

Regarding claim 24, Lee further discloses a vehicle separable hands free unit for a mobile wireless telephone, including means for activating the base unit while the call is in process (#15 fig. 1, and col. 2 line 42 thru col. 3 line 5).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (6,076,000).

Regarding claim 1, Lee discloses a vehicle separable hands free unit for a mobile wireless telephone having internal audio circuitry for an internal speaker and an internal microphone (abstract, fig. 1-5), comprising:

Art Unit: 2683

-a base unit (fig. 1), a vehicle separable connector quickly connectable to the vehicle's power supply for supplying power to the base unit (fig. 1), said base unit including a hands free speaker (#13 fig. 4) and a hands free microphone (#16 and #22 fig. 4),

- AHF control means in the base unit for commanding the telephone to disconnect the telephone's internal speaker and internal microphone and connect the internal audio circuits to the base unit and to activate the base unit hands free speaker and hands free microphone, PHF control means in the base unit for commanding the telephone to connect the telephone's internal speaker and internal microphone to the internal audio circuits and to deactivate the base unit hands free speaker and hands free microphone, and a manually operable switch in the base unit for selecting alternatively the AHF control or the PHF control (#15 fig. 1-2, col. 2 lines 21-67). However, Lee does not specifically disclose AHF control means and PHF control means to disconnect or connect the internal speaker and internal microphone. But, Lee discloses the switch (#15 fig. 1-2) is used to select ON/OFF for connect or disconnect the internal speaker and internal microphone of the portable device, which means the switch is acting the same function as of AHF control and PHF control.

Regarding claim 2, Lee further discloses vehicle separable hands free unit for a mobile wireless telephone, wherein the switch includes a user finger operable optical switch (#15 fig. 1-2).

8. Claims 7, 22, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (6,304,764) in view of Wilson (6,081,724).

Regarding claim 7, Lee further discloses a vehicle separable hands free unit for a mobile wireless telephone, said base unit including a circuit (abstract, fig. 4-5).

However, Lee does not specifically disclose a duplex circuit.

Wilson teaches a hands-free kit for a mobile wireless telephone, base unit including a duplex circuit for attenuating the level of the hands free microphone at predetermined values of the telephone's internal audio circuits (fig. 2, col. 2 lines 59 thru col. 3 line 9). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify Lee's system with the teaching of Wilson of duplex circuit in order to match up with the audio level of the user's telephone.

Regarding claim 22. Lee discloses a vehicle separable hands free unit for a mobile wireless telephone having internal audio circuitry for an internal speaker and an internal microphone (abstract, fig.1, fig. 4-5), comprising: a base unit, a vehicle separable connector quickly connectable to the vehicle's power supply for supplying power to the base unit, said base unit including a hands free speaker and a hands free microphone (fig. 1), and a circuit (fig. 4-5) in the base unit. However, Lee does not specifically disclose a duplex circuit.

Wilson teaches a hands-free kit for a mobile wireless telephone, base unit including a duplex circuit for attenuating the level of the hands free microphone at predetermined values of the telephone's internal audio circuits (fig. 2, col. 2 lines 59 thru col. 3 line 9). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify Lee's system with the teaching of Wilson of duplex circuit in order to match up with the audio level of the user's telephone.

Art Unit: 2683

Regarding claim 25, Lee disclose a vehicle separable hands free unit for a mobile wireless telephone having internal audio circuitry for an internal speaker and an internal microphone (abstract, fig. 1, fig. 4-5), comprising: a base unit (#1 fig. 1), a vehicle separable connector quickly connectable to the vehicle's power supply for supplying power to the base unit, said base unit including a hands free speaker and a hands free microphone, and a circuit in the base unit (abstract, fig. 1-5). However, Lee does not specifically disclose a circuit in the base unit for reducing echo from the speaker.

Wilson teaches the hands free kit includes the circuit in the base unit for reducing echo from the speaker (co. 5 lines 42-57). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify Lee's system with the teaching of Wilson of circuit in the base unit in order to eliminate the echo from the speaker to provide user with clear reception while in the conversation.

9. Claims 3-6, and 26-27 are objected to as being dependent upon a rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter:

The present invention relates to a vehicle separable hands free unit for mobile wireless telephone, wherein the AHF control means and PHF control means are

Art Unit: 2683

incorporated in part in the microprocessor, wherein microprocessor utilizing the ID packet from the phone to identify a look-up value on a table to generate an AHF packet and an PHF packet.

Another aspect of present invention is by implementing the click less opto resistors and using summing inverted ground signal with audio signals in a vehicle separable hands free unit to reduce echo and cancel noise from the speaker.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lee (6,076,000) and Wilson (6,081,724) disclose a vehicle separable hands free unit for a mobile wireless telephone.

12. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

703 308-9051, (for formal communication intended for entry)

Or:

(703) 305-9509 (for informal or draft communications, please label

"PROPOSED" OR "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington. VA. Sixth floor (Receptionist).

Art Unit: 2683

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D Nguyen whose telephone number is (703) 605-1301. The examiner can normally be reached on 7:00 AM to 4:30 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703) 308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

Joseph Nguyen



Sept. 17, 2003



WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600